

CLAIMS

What is claimed is:

1. A compliance device comprising:
a housing;
a support block coupled to said housing and movable relative to said housing along a linear axis; and
a tool holder coupled to said support block and rotatable relative to said support block about a rotational axis.
2. The compliance device of claim 1 wherein said rotational axis is substantially perpendicular to said linear axis.
3. The compliance device of claim 1 further including a linear slide coupling said support block to said housing, said linear slide having a first member fixed to said housing and a second member fixed to said support block, said second member being linearly movable relative to said first member.
4. The compliance device of claim 3 further including a first biasing assembly coupled to said housing, operably engaging said support block and said housing, and urging said support block toward a linearly centered position.

5. The compliance device of claim 4 further including a second biasing assembly coupled to said housing and operably engaging said tool holder to urge said tool holder toward a rotationally centered position.

6. The compliance device of claim 5 wherein said second biasing assembly further includes adjustable stops to limit rotation of said tool holder about said rotational axis.

7. The compliance device of claim 6 wherein second biasing assembly further includes first and second dowels fixed to rotate with said tool holder and biasing elements operably engaging said first dowel to urge said tool holder toward the rotationally centered position, and wherein said adjustable stops engage said second dowel to limit rotation of said tool holder about said rotational axis.

8. The compliance device of claim 7 wherein said biasing elements are spring plungers.

9. The compliance device of claim 8 wherein said adjustable stops are set screws.

10. A trimming assembly for trimming flash from a workpiece, comprising:
a positioning mechanism; and
a compliance device coupled to said positioning mechanism, said compliance device including a housing, a support block coupled to said housing and movable relative to said housing along a linear axis, and
a tool holder coupled to said support block and rotatable relative to said support block about a rotational axis.

11. The trimming assembly of claim 10 wherein said rotational axis is substantially perpendicular to said linear axis.

12. The trimming assembly of claim 10 further including a linear slide coupling said support block to said housing, said linear slide having a first member fixed to said housing and a second member fixed to said support block, said second member being linearly movable relative to said first member.

13. The trimming assembly of claim 12 further including a first biasing assembly and a second biasing assembly, said first biasing assembly coupled to said housing, operably engaging said support block and said housing, and urging said support block toward a linearly centered position, said second biasing assembly coupled to said housing and operably engaging said tool holder to urge said tool holder into a rotationally centered position.

14. The trimming assembly of claim 13 wherein second biasing assembly further includes first and second dowels fixed to rotate with said tool holder, biasing elements operably engaging said first dowel to urge said tool holder toward the rotationally centered position, and adjustable stops operably engaging said second dowel to limit rotation of said tool holder about said rotational axis, wherein said first dowel is spaced from and aligned with said second dowel.

15. The trimming assembly of claim 12 wherein said positioning assembly is controllable to position said compliance device such that said linear axis is maintained substantially perpendicular to the flash line of the workpiece during operation.